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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,958	06/29/2001	Xuelu Zou	024705-110	6091

7590 11/21/2002

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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 11/21/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,958

Applicant(s)

ZOU ET AL.

Examiner

Elizabeth A. Bolden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 59-107 is/are pending in the application.
- 4a) Of the above claim(s) 102-104 and 107 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 59-101, 105 and 106 is/are rejected.
- 7) ☒ Claim(s) 61 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the two groups are drawn to sufficiently interrelated inventions so that a complete search of the composition would result in a search of the process. This is not found persuasive because Group I is a glass composition classified in class 501, subclass 47 and Group II is a method of making glass products classified in class 65, subclass 66.

The requirement is still deemed proper and is therefore made FINAL.

Specification

Applicant is reminded of the proper content of an Abstract of the Disclosure.

In chemical patent abstracts for compounds or compositions, the general nature of the compound or composition should be given as well as its use, *e.g.*, "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary.

The composition should be given in the abstract.

Complete revision of the content of the abstract is required on a separate sheet.

The disclosure is objected to because of the following informalities:

The "Summary of the Invention" refers claims in multiple instances. See page 6, lines 20 and 26, page 7, line 18, and page 8, line 26 for examples. This part of the disclosure should not refer to the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 66-69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3 are indefinite because no specific composition for the material is set forth. "An article characterized by physical properties alone and no specific composition is vague and indefinite". See *Ex parte Slob*, 157 USPQ 172.

The term "substantial" in claims 66-69 is a relative term which renders the claims indefinite. The term "substantial" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claims do not define what amount of GeO₂ would be considered substantial enough to affect the glass in a way to require its absence.

Claim Objections

Claim 61 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

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claim(s) in independent form. Claim 61 is dependent from claim 14, which includes the limitation: "where ... a density of oxygen atoms contained is in the range of from 4.2×10^{22} to $5.2 \times 10^{22}/\text{cm}^3$." This recitation is no different than claim 61.

Claim 65 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 65 depends from claim 15, but does not further limit claim 15 because claim 15 already requires Li_2O in a content from 2 to 30 molar percent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-19, 59-101, 105, and 106 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Nakahata et al., U.S. Patent 6,333,282.

Nakahata et al. disclose an optical glass comprising in weight percent 14-31 % P_2O_5 , 0-5 % B_2O_3 , 0-14 % GeO_2 , 0-6 % Li_2O , 2.5-14 % Na_2O , 22-50 % Nb_2O_5 , 0-30 % WO_3 , 5-36 % Bi_2O_3 , and 0-22 % BaO . See abstract of Nakahata et al. Additionally, Nakahata et al. disclose

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examples 12 and 13. See Table 1. These examples are given in weight percent the table below shows both the weight and mole percent values.

	MW	EX 12 WT %	EX 12 MOL %	EX 13 WT %	EX 13 MOL %
B ₂ O ₃	69.62	4.50	9.58	1.00	2.11
P ₂ O ₅	141.92	14.50	15.14	20.00	20.72
GeO ₂	103.91				
Li ₂ O	30.00	3.00	14.82	1.00	4.90
Na ₂ O	61.97	3.00	7.17	11.00	26.10
BaO	153.33	22.00	21.26	7.00	6.71
Nb ₂ O ₅	265.80	31.00	17.28	40.00	22.13
WO ₃	103.90	7.00	9.98	10.00	14.15
Bi ₂ O ₃	465.95	15.00	4.77	10.00	3.16

Example 12 meets the compositional limitations of claims 4-14, 17, 61, 64, 66, 70, 74, 78, 85-88, and 95-98 and example 13 meets all the compositional limitations of claims 4-19, 59-101, 105, and 106.

Nakahata et al. disclose that the glass has a yield temperature of at most 550 °C, a refractive index of at least 1.83 and an Abbe number of at most 26.0. See abstract of Nakahata et al. These ranges of properties are sufficiently specific to anticipate the respective property limitations in claims 1-3 and 70-77. See MPEP 2131.03.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Nakahata et al. would inherently have the same properties i.e. density of oxygen atoms, viscosity at liquid phase, T_g, Transmittance at λ_{80} and λ_5 , and liquid phase temperature as recited in claims 1-3, 14, 61-64, 70-73, and 78-81. See MPEP 2112.

The reference discloses that the glass can be formed into a preform and then precision molded to obtain lenses. See column 5, lines 11-17. Thus meeting the limitation of claims 82-101.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EAB
November 15, 2002


DAVID SAMPLE
PRIMARY EXAMINER